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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,533	07/19/2006	Hirofumi Yasuda	040302-0579	6031
22428	7590	11/18/2008	EXAMINER	
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				NGUYEN, CAM N
1793		ART UNIT		PAPER NUMBER
11/18/2008		MAIL DATE      DELIVERY MODE		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/586,533	YASUDA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cam N. Nguyen	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08/12/08 (an election).  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.  
 4a) Of the above claim(s) 8-15 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-7 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on originally filed is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/19/06</u> .  | 6) <input type="checkbox"/> Other: _____ .                        |

## DETAILED ACTION

### Response to Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-7, in the reply filed on 08/12/08 is acknowledged.
2. Claims 8-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention(s), there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 08/12/08.

### Claim Objections

3. Claim 7 is objected to because of the following informalities:  
  
In line 2, "used for catalyst which purifies" should be changed to --used for purifying--.  
  
Appropriate correction is required.

### Claim Rejections - 35 USC § 112 (Second Paragraph)

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.  
  
Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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A. Regarding claim 1, the phrase "a predetermined interval each other" does not particularly point out the specific value being required.

B. Regarding claim 3, the proper Markush terminology is --wherein the noble metal is at least one selected from the group consisting of platinum, palladium, rhodium, iridium, ruthenium, osmium and gold.--

C. Regarding claim 4, the proper Markush terminology is --wherein the transition metal is at least one selected from the group consisting of manganese, iron, cobalt, nickel, copper and zinc.-

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D. Regarding claim 5, the proper Markush terminology is --wherein the support material is at least one selected from the group consisting of aluminum oxide, cerium oxide, zirconium oxide, silicon oxide, titanium oxide, ~~silica-alumina~~ silica-alumina, vanadium oxide and tungsten oxide.--

E. Regarding claim 6, the proper Markush terminology is --a compound composed of at least one selected from the group consisting of cerium, neodymium, praseodymium, lanthanum, zirconium, barium and magnesium.--

#### **Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

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*Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

A. Claims 1-8 & 17-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, & 6 of copending Application No. 11/079,270. Although the conflicting claims are not identical, they are not patentably distinct from each other because: *the catalyst structure of the claimed catalyst and the disclosed (copending '270) catalyst are the same because they both contain the same support, noble metal particle, and transition metal particle. Regarding the noble metal particle limitation disclosed in the copending '270, it is inherent and expected that the claimed noble metal particle would possess the same properties because the noble metal particle is the same and in view of the same particle size limitation in the instant claim 2.*

B. Claims 1-8 & 17-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 & 3-6 of copending Application No. 11/079,377. Although the conflicting claims are not identical, they are not patentably distinct from each other because: *Same reasons as provided in A above.*

C. Claims 1-8 & 17-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, & 7 of copending Application No. 11/722,275. Although the conflicting claims are not identical, they are not patentably distinct from each other because: *Same reasons as provided in A above.*

D. Claims 1-8 & 17-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 & 4-6 of copending Application No. 11/578,295. Although the conflicting claims are not identical, they are not patentably distinct from each other because: *Same reasons as provided in A above.*

E. Claims 1-8 & 17-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, & 4-5 of copending Application No. 10/589,890. Although the conflicting claims are not identical, they are not patentably distinct from each other because: *Same reasons as provided in A above.*

F. Claims 1-8 & 17-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 & 4-6 of copending Application No. 10/584,346. Although the conflicting claims are not identical, they are not patentably distinct from each other because: *Same reasons as provided in A above.*

G. Claims 1-8 & 17-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2-3, & 7 of copending Application No. 10/584,243. Although the conflicting claims are not identical, they are not patentably distinct from each other because: *Same reasons as provided in A above.*

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**Claim Rejections - 35 USC § 102(b)**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

A. Claims 1 & 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al., hereinafter “Ito ‘499”, (US Pat. 4,857,499).

Ito ‘499 discloses a high temperature combustion catalyst consisting essentially of a porous carrier layer, a catalyst component and first, second, and third promoter components, the latter four components being carried on the porous carrier layer; the catalyst component including at least one noble metal elements from the group consisting of palladium and platinum; the first promoter component including at least one substance from the group consisting of lanthanum, cerium, praseodymium, neodymium, barium, strontium, calcium, and oxides thereof; the second promoter component including at least one substance from the group consisting of magnesium, silicon and oxides thereof; the third promoter component including at least one substance from the group consisting of nickel, zirconium, cobalt, iron, manganese, and oxides thereof (see col. 17, claim 1). The carrier layer includes at least one inorganic material from the group consisting of alumina, titania, zirconia, aluminum titanate, and silica (see col. 17, claim 4). The catalyst further comprising a heat-resistant carrier substrate support said porous carrier layer, said carrier substrate including at least one ceramic material from the group consisting of cordierite, mullite, alpha-alumina, zirconia, and titania (see col. 17, claim 5).

There is no patentable distinction seen between the claimed catalyst and that disclosed by Ito ‘499. Thus, the claims are anticipated by the teachings of the reference.

B. Claims 1, 3-5, & 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Vorlop et al., hereinafter “Vorlop ‘496”, (US Pat. 5,122,496).

Vorlop ‘496 discloses a catalyst consisting of a porous inorganic carrier material impregnated with a metal compound selected from the group consisting of palladium, rhodium, mixtures of palladium and rhodium, and mixtures of palladium and a metal of the copper group, etc. (see col. 17, claim 1). The carrier material is selected from the group consisting of aluminum oxide, silicon oxide, and aluminosilicates (see col. 18, claim 7). The metal of the copper group is selected from the group consisting of copper and silver (see col. 18, claim 9). Further, said metal of the copper group is copper (see col. 18, claim 10).

There is no patentable distinction seen between the claimed catalyst and that disclosed by Vorlop ‘496. Thus, the claims are anticipated by the teachings of the reference.

C. Claims 1 & 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ihara et al., hereinafter “Ihara ‘647”, (US Pat. 5,039,647).

Ihara ‘647 discloses a catalyst for purifying exhaust gases comprising a carrier carrying alumina, zirconium oxide and a noble metal catalyst, etc., said carrier carries the alumina as a layer having dispersed therein the zirconium oxide particles, said zirconium oxide particles carrying said noble metal catalyst (see col. 12- col. 13, claim 1). The alumina layer additionally contains cerium oxide particles having lanthanum oxide dispersed therein (see col. 13, claim 2). Further, the zirconium oxide particles contain rhodium as said noble metal catalyst and said alumina layer additionally contains alumina particles dispersed therein, said alumina particles carrying platinum as a further noble metal catalyst (see col. 13, claim 3).

There is no patentable distinction seen between the claimed catalyst and that disclosed by Ihara '647. Thus, the claims are anticipated by the teachings of the reference.

**Citations**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared.

**Conclusion**

8. Claims 1-15 are pending. Claims 1-7 are rejected. Claims 8-15 are withdrawn due to nonelected (distinct) invention(s). No claims are allowed.

**Contacts**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner CAM N. NGUYEN, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Primary Examiner

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/C. N. N./

November 17, 2008